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REMEDIAL ACTION PLAN ADDENDUM FACILITY 325 NSA PANAMA CITY FL

8/22/1996

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August 22, 1996 Document No. 7520-105

Mr. Eric Nuzie
Federal Facilities Coordinator
Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

Subject: **Submittal of Facility 325 RAP Addendum Coastal Systems Station (CSS) Panama City, Panama City, Florida.**
Contract #N62467-89-D-0317, CTO No. 011

Dear Mr. Nuzie:

A remedial action plan (RAP) for Facility 325 at Coastal Systems Station, Panama City was submitted to the Florida Department of Environmental Protection (FDEP) on May 20, 1996. After reviewing the RAP, FDEP has released comments which were received on June 17, 1996 (dated June 10, 1996).

Southern Division Naval Facilities Engineering Command (NAVFACENGCOM) anticipates this addendum, in response to the comments generated by FDEP, will provide further clarification on the two main issues: 1) technical requirements to implementing the air sparging system, and 2) assurance of funding if air sparging is implemented. This addendum also includes minor modifications that were made to the vapor treatment system and the design layout.

I. Technical Requirements for Implementing Air Sparging:

A. The absence of measurable thickness of free product will mark the beginning of the period when free product is no longer present at the site. Monthly free product monitoring should indicate that there is no measurable thickness of product (i.e., 0.01 inches or less) in any of the monitoring wells for three consecutive months of monitoring.

B. Monthly/quarterly groundwater monitoring indicates that the concentrations of contaminants of concern are above the monitoring only plan (MOP) levels as specified in chapter 62-770 Florida Administrative Code (FAC).

II. Overall scope of RAP:

Upon meeting the technical requirements for Air Sparging as presented in the RAP and detailed above in item number I, NAVFACENGCOM will direct the operation and maintenance contractor to install the air compressor to the sparge piping connecting air sparging wells installed during the construction phase of the project. This approach is consistent with the specifications presented in the RAP (Section 4.2.2, page 4-12). NAVFACENGCOM has allocated necessary funding to purchase the compressor component of the remedial action at any time it is necessary.

III. Modification to Vapor Treatment (Section 4-4, page 4-16):

The RAP submitted to FDEP in May 1996 proposed using a gaseous phase Granular Activated Carbon filter for treatment of vapors (as required by Chapter 62-770 F.A.C.) extracted as part of the vacuum enhanced extraction process. After further evaluation NAVFACENGCOM proposes using a catalytic oxidizer Model "CATVAC 50" with the following general specifications as detailed in the "Operational and Maintenance Manual, THERMTECH, INC. (713) 359-7555."

SCFM rating	500 SCFM
burners maximum output capability	500,000 BTU/Hr
burner turndown ratio	20 to 1
combustion blower motor size	0.75 HP
preheat chamber I D	12" x 12" x 60"
stack I D	12" x 12"
skid size	48" x 95"
velocity through 4" process inlet	
@ 250 SCFM from process stream	47.5 ft./sec.
@ 500 SCFM from process stream	95.0 ft./sec.

NAVFACENGCOM currently owns a new catalytic oxidizer meeting these specifications and its use will result in significant cost savings in this remediation effort. Air monitoring efforts would be implemented as presented in the RAP (section 4.6.2). Air emissions will be monitored once every week for the first two months and once every month for the remainder of the year.

IV. Modifications to Design Layout (Figure 4-5, page 4-10):

1. The RAP proposed installing 10 independent vacuum lines connecting to each of the drop tubes and the well casings and manifolding them in the compound before connecting to the liquid ring pump (section 4.1.2.2, page 4-6, last paragraph). NAVFACENGCOM proposes to modify the layout and install only 5 lines and further bifurcate each line at the well point to provide the source of vacuum to the draw tube and the well casing. This modification is intended to reduce the construction costs and does not impact the effectiveness of the overall performance of the vacuum enhanced extraction (VEE) system.

2. The RAP proposed installing permanent transducers at each of the vacuum enhanced extraction points (VEEP). NAVFACENGCOM proposes deleting this item, and retaining the piezometer next to each of the VEEPs for manual measurement of water levels, and free product levels.

3. NAVFACENGCOM proposes installing a solenoid valve on each of the draw tubes which are electrically connected to the high level sensor of the temporary liquid holding tank. This will facilitate shutting off the flow of liquid when the holding tank is full, while maintaining an uninterrupted operation of the soil vapor extraction component of the VEE system.

V. Professional Review Certification

This RAP addendum was prepared using standard engineering practices and designs. The plan for remediating this site is based on the information collected between October 1992 and April 1996, the engineering detailed in the RAP submitted on May 20, 1996, and additional engineering details presented in this addendum. If conditions are determined to exist that are different than those described, the undersigned engineer should be notified to evaluate the effects of any additional information on the design in the RAP and this addendum.

This RAP addendum was developed for Facility 325, Panama City, Florida, and should not be construed to apply to any other site.

Gopi Kanchibhatla, P.E. 8/22/96
Professional Engineer
License No. 0049494

Should you have any questions concerning this letter please feel free to contact me or Gopi Kanchibhatla at (904)-656-1293.

Sincerely,

Mark C. Diblin

Mark C. Diblin, P.G.
Senior Project Manager

cc: Mike Dunaway, ABB-ES
Greg Brown, FDEP
Nick Ugolini, SouthDiv
Tom Conrad, Bechtel